



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D3118-3
Job Sheet 212733



Part No: D3118-3

Job Qty: 5 pcs

Part Name: Sign Assembly



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 9/1/20

Job Tracking No:

Due Date: 11/13/20

Created By: Kimberley Guerin

Type: Stock

Description:

Note: DWG REV E IPP A: 02.05.15 New Issue NG IPP REV:B 12.05.11 AS PER DWG REV.D DD VERF:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard Setup Hrs	Run Hrs	Workcenter/Supplier	Workcenter / Supplier Lead Time	Sign-off
100	Purchasing	5 pcs	11/13/20	11/13/20	0.00	0.00	Purchasing - 1		11/09/2020
							Purchasing - 2		
							Purchasing - 3		
110	Packaging 2-1 - Receive - B4B	5 pcs	11/13/20	11/13/20	0.00	0.00	Packaging 2 - 1 - B4B		
							Packaging 2 - 2 - B4B		
							Packaging 2 - 3 - B4B		
							Packaging 2 - 5 - B4B		11/09/2020
							Packaging 2 - 4 - B4B		
							Packaging 2 - 6 - B4B		
							Packaging 2 - 7 - B4B		
							Packaging 2 - 8 - B4B		
							Packaging 2 - 9 - B4B		
							Packaging 2 - 10 - B4B		
							Packaging 2 - 11 - B4B		
							Packaging 2 - 12 - B4B		
							Packaging 2 - 13 - B4B		
							Packaging 2 - 14 - B4B		
							Packaging 2 - 15 - B4B		
							Packaging 2 - 16 - B4B		
							Packaging 2 - 17 - B4B		
							Packaging 2 - 18 - B4B		
							Packaging 2 - 19 - B4B		
							Packaging 2 - 20 - B4B		
							Packaging 2 - 21 - B4B		
							Packaging 2 - 22 - B4B		
							Packaging 2 - 23 - B4B		
							Packaging 2 - 24 - B4B		
							Packaging 2 - 25 - B4B		
							Packaging 2 - 26 - B4B		
							Packaging 2 - 27 - B4B		
							Packaging 2 - 28 - B4B		



Container No: S311640



Part: D3118-3

Job No: 212733

Serial No/Batch: S311640

Revision: E

Inspector:

Exp Date: 11/09/2027

Instructions: Various STC's

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 11/09/20

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				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
				Packaging 2 - 37 - B4B	
120	QC 6	5 pcs	11/13/20	0.00 0.00	QC 6 - 9
					QC 6 - 68
					QC 6 - 61
					QC 6 - 40
					QC 6 - 81
					QC 6 - 82
130	Packaging 3-1 - Stock - B4B	5 pcs	11/13/20	0.00 0.00	Packaging 3 - 1 - B4B
					Packaging 3 - 2 - B4B
					Packaging 3 - 3 - B4B
					Packaging 3 - 4 - B4B
					Packaging 3 - 5 - B4B
					Packaging 3 - 6 - B4B
					Packaging 3 - 7 - B4B
					Packaging 3 - 8 - B4B
					Packaging 3 - 9 - B4B
					Packaging 3 - 10 - B4B
					Packaging 3 - 11 - B4B
					Packaging 3 - 12 - B4B
					Packaging 3 - 13 - B4B
					Packaging 3 - 14 - B4B
					Packaging 3 - 15 - B4B
					Packaging 3 - 16 - B4B
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					Packaging 3 - 26 - B4B
					Packaging 3 - 27 - B4B
					Packaging 3 - 28 - B4B
					Packaging 3 - 29 - B4B
					Packaging 3 - 30 - B4B
					Packaging 3 - 31 - B4B
					Packaging 3 - 32 - B4B
					Packaging 3 - 33 - B4B
					Packaging 3 - 34 - B4B
					Packaging 3 - 35 - B4B
					Packaging 3 - 36 - B4B
					Packaging 3 - 37 - B4B
140	QC 21 - SA	5 pcs	11/13/20	0.00 0.00	QC 21 - SA - 21
					QC 21 - SA - 70
					QC 21 - SA - 9
					QC 21 - SA - 77

Part Op 100 - Purchasing - Issue P/O: _____ Manufacture as per dwg D3118 Possible Supplier:SRB TECHNOLOGIES
 Descriptions: Supplier P#:9004043 Sign should be self-luminous to min. brightness of 160 microlamberts
 110 - Receive & Inspect for Damage & Mat'l Certs - Ensure Material Release Note is attached

- 120 - QC6- All purchased or subcontracted products - Check dims to dwg and certification attached
130 - Identify as per dwg & Stock Location: _____
140 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
9004043	Sign Assembly D3118-3	5 pcs (1 ea)	100-Purchasing	S311639

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	9004043	5	0	0

Part Specifications

Specifications could not be found.

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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB047001



Supplier: ROY003-VU
Royal Bank Visa (Robert Aboud)
x
xx
ON
Canada

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB047001

PO Date: 9/1/20

Due Date: 11/10/20

Purchase Order

Revision:

Revision Date:

Issued By: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Fedex P1 Overnight

Pynt Terms: COD

Freight Terms: Collect

Special Comments: SRBT TECHNOLOGIES

Items

Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	212618	9004043	D3118		Sign Assembly D3118-3 AS PER DWG D3118 REV. E	Firmed X1	-	10/2/20	1 pcs	0 pcs	1 pcs	\$868.43/pcs	\$868.43
OCT 09 2020													
Line Item Note ***QTY 1 TO BE EXPEDITED***													
2	212733	9004043	D3118		Sign Assembly D3118-3 AS PER DWG D3118 REV. E	Firmed XS	-	11/10/20	5 pcs	0 pcs	5 pcs	\$434.22/pcs	\$2,171.10
NOV 09 2020													
Grand Total:													\$3,039.53

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

- A005 RIGHT OF ENTRY
- A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)
- A012 CHEMICAL AND PHYSICAL TEST REPORTS
- A016 PERSONNEL QUALIFICATION
- A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)
- A026 CERTIFICATION OF MATERIAL CONFORMANCE
- A041 QUALITY MANAGEMENT SYSTEM
- A042 DART NOTIFICATION BY SUPPLIER
- A043 RETENTION OF QUALITY DOCUMENT
- A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM
- A049 SUPPLIER AWARENESS

Please ensure to send the related invoice to hby_ap@dartaero.com.

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Canadian Nuclear Safety Commission

Radiation Safety Data Sheet

This data sheet presents information on radioisotopes only.

For information on chemical compounds incorporating this radionuclide, see the relevant Material Safety Data Sheet.

Part 1 - RADIOACTIVE MATERIAL IDENTIFICATION

Chemical Symbol:	H	Common Names:	Tritium
Atomic Weight:	3	Atomic Number:	1

Part 2 - RADIATION CHARACTERISTICS

Physical Half-Life:	12.35 years	
Unconditional Clearance Levels:	Activity Concentration (Bq/g)	1×10^2
CNSC Exemption Quantity:	Activity Concentration (Bq/g)	1×10^6
	Activity (Bq)	1×10^9

Principal Emissions	Average Energy of Most Abundant Emission (MeV)	Maximum Energy of Most Abundant Emission (MeV)	Gamma-Ray Dose Rate at 1m Distance (mSv/h per GBq)	Shielding Information ¹
Neutrons	-	-	-	-
Gamma & X-ray	-	-	-	-
Beta* & Electron	0.0057	0.0186	-	Total absorption: <0.1 mm glass or <0.1 mm plastic
Alpha	-	-	-	-

* Where beta radiation is present, bremsstrahlung radiation will be produced. Shielding for bremsstrahlung radiation must be considered.

¹Delacroix, D. et al, Radionuclide and Radiation Protection Data Handbook 2002.

Progeny	
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Part 3 - DETECTION AND MEASUREMENT

Method of Detection:

Wipes counted by a beta probe (e.g., wipes counted by a liquid scintillation counter)

Dosimetry:

External: TLD (whole body & skin) _____ Extremity _____ Neutron _____

Internal: Whole body _____ Thyroid _____ Urine analysis ☒ Other (specify) _____

Part 4 - PREVENTATIVE MEASURES

Tritium is not a radiation hazard unless it enters the body. Once in the body, tritiated water is uniformly distributed in the body water and can then expose tissue. The dose from inhaled elemental tritium gas is 10,000 times less than that from tritiated water. Tritiated water can be absorbed through the surface of skin, leading to an internal exposure. Gaseous tritium is a fire and explosion hazard when exposed to heat or flame and can react vigorously with oxidizing materials.

Recommended protective clothing: Lab coat and PVC gloves (0.5 mm thick) are preferred because of this material's low permeability to tritiated water. Many tritium compounds readily penetrate gloves and skin. Handle these compounds remotely, wear two pairs of gloves and change the outer layer at least every twenty minutes. Plastic aprons provide added protection especially against tritiated water. Plastic suits may be necessary for work at TBq levels or in an atmosphere contaminated with tritiated water.

Handle tritiated water, gases and volatile liquids in ventilated enclosures. Use glass containers to store tritium compounds because tritiated water and tritiated organic solvents will pass through plastic. Use disposable absorbent liners on trays.

Consult CNSC license for requirements concerning engineering controls, protective equipment, and special storage requirements.

Part 5 - ANNUAL LIMIT ON INTAKE

	Ingestion	Inhalation	
Compound Type	Tritiated water	Tritiated water	Elemental tritium gas
Annual Limit on Intake (Bq)	1.0×10^9	1×10^9	1.0×10^{13}

EMERGENCY PROCEDURES

The following is a guide for first responders. The following actions, including remediation, should be carried out by qualified individuals. In cases where life threatening injury has resulted, **first** treat the injury, **second** deal with personal decontamination. In the case of an emergency, the Radiation Safety Officer should be contacted as soon as practicable.

Personal Decontamination Techniques

- Wash well with soap and water and monitor skin
- Do Not abrade skin, only blot dry
- Decontamination of clothing and surfaces are covered under operating and emergency procedures

Spill and Leak Control

- Alert everyone in the area
- Clear area
- Summon Aid

Emergency Protective Equipment, Minimum Requirements

- Gloves
- Footwear Covers
- Safety Glasses
- Outer layer or easily removed protective clothing
- Suitable respirator selected

Canadian Nuclear Safety Commission
P.O. Box 1046, Station B
Ottawa, Canada
K1P 5S9

Tel: (613) 995-5894 Fax: (613) 995-5086
24 Hour Emergency Hotline: (613) 995-0479

Revision number: 1

Date of revision: 19 September 2011

Reviewed by: T. Sennett, Compliance Manager

Date: August 28, 2018

CERTIFICATE OF CONFORMANCE

ACCOUNT TO:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON
Canada K6A 1K7

CERTIFICATE OF CONFORMANCE ID:

CDN007511

YOUR REFERENCE:

POHB047001

OUR REFERENCE:

POHB047001

DATE:

November 5, 2020

ITEM #	PART NUMBER	DESCRIPTION/ SPECIFICATION	QUANTITY	REMARKS/ DELIVERY POSITION
2	D3118-3 (9004043) SRBT P/N: 9004043	Sign Assembly T 4.25 Ci. (157.25 GBq) S/N's: 44203 - 44207 (Ref. Dwg# D3118 Rev. E)	5	Batch # B047001 (POHB047001) Mfg. November/2020 Recommended expiry 7 years from Mfg date DAS 81 9-89

This is to certify that the whole of the material and/or parts described herein have been manufactured to the quality standards registered under ISO 9001:2008 and conform to the full specification of the appropriate drawings and purchase order requirements.

Test methods for Betalights™ and devices containing Betalights™, including leakage and surface contamination, conform to the British Defence Standard 62-4/4 and/or ANSI/HPS N43.4-2000.

Signed for on behalf of SRB Technologies (Canada) Inc.


N. Belleau, Quality Manager

SRB TECHNOLOGIES (CANADA) INCORPORATED

320 Boundary Road, Suite 140, Pembroke, Ontario, Canada; Phone (613) 732-0055

SRB37640

SHIPMENT PACKING SLIP AND MANIFEST

DATE:	November 5, 2020
WAYBILL #:	FedEx Priority: 1076 1426 1615 * ✓
DESTINATION:	Dart Aerospace Ltd.; Hawkesbury, ON, Canada

[illegible]

TYPE OF SHIPMENT

- | | | | |
|--|--|---|---|
| ☐ UN2915
Radioactive Material,
Type A Package | ☒ UN2911
Radioactive Material,
Excepted Package - Articles | ☐ UN2910
Radioactive Material,
Excepted Package,
Limited Quantity of Material | ☐ Regular
Non-Radioactive |
|--|--|---|---|

EXPORT LICENCE #:	N/A
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NO. OF PACKAGES:		1	PACKED BY:		Darci Gaudette - Logistics Manager	
TOTAL ACTIVITY:		21.25	Ci.	Attention: Kimberley Guerin		
DIM (in):	9 X 9 X 11			www.betalight.com		SHIPMENT WEIGHT (lbs.)